

# WEST Search History

DATE: Thursday, May 15, 2003

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
side by side			result set
<i>DB=USPT; PLUR=YES; OP=ADJ</i>			
L13	selective advantage and (arabitol or ribitol)	0	L13
L12	L11 and (arabitol or ribitol)	4	L12
L11	l9 and (transform\$ or transgenic)	735	L11
L10	L9 and (transform? or transgenic)	576	L10
L9	L8 and plant	761	L9
L8	positive selection	1705	L8
L7	postive selection	1	L7
L6	(l2 or l4) and positive selection	1	L6
L5	(l2 and l4) and positive selectioin	0	L5
L4	L3 and transgenic	18	L4
L3	ribitol and plant	128	L3
L2	L1 and transformation	66	L2
L1	arabitol and plant	270	L1

END OF SEARCH HISTORY

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PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2	Apr 08	"Ask CAS" for self-help around the clock
NEWS	3	Jun 03	New e-mail delivery for search results now available
NEWS	4	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS	5	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS	6	Aug 26	Sequence searching in REGISTRY enhanced
NEWS	7	Sep 03	JAPIO has been reloaded and enhanced
NEWS	8	Sep 16	Experimental properties added to the REGISTRY file
NEWS	9	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS	10	Oct 01	CASREACT Enriched with Reactions from 1907 to 1985
NEWS	11	Oct 24	BEILSTEIN adds new search fields
NEWS	12	Oct 24	Nutraceuticals International (NUTRACEUT) now available on STN
NEWS	13	Nov 18	DKILIT has been renamed APOLLIT
NEWS	14	Nov 25	More calculated properties added to REGISTRY
NEWS	15	Dec 04	CSA files on STN
NEWS	16	Dec 17	PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS	17	Dec 17	TOXCENTER enhanced with additional content
NEWS	18	Dec 17	Adis Clinical Trials Insight now available on STN
NEWS	19	Jan 29	Simultaneous left and right truncation added to COMPENDEX, ENERGY, INSPEC
NEWS	20	Feb 13	CANCERLIT is no longer being updated
NEWS	21	Feb 24	METADEx enhancements
NEWS	22	Feb 24	PCTGEN now available on STN
NEWS	23	Feb 24	TEMA now available on STN
NEWS	24	Feb 26	NTIS now allows simultaneous left and right truncation
NEWS	25	Feb 26	PCTFULL now contains images
NEWS	26	Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
NEWS	27	Mar 20	EVENTLINE will be removed from STN
NEWS	28	Mar 24	PATDPAFULL now available on STN
NEWS	29	Mar 24	Additional information for trade-named substances without structures available in REGISTRY
NEWS	30	Apr 11	Display formats in DGENE enhanced
NEWS	31	Apr 14	MEDLINE Reload
NEWS	32	Apr 17	Polymer searching in REGISTRY enhanced
NEWS	33	Apr 21	Indexing from 1947 to 1956 being added to records in CA/CAPLUS
NEWS	34	Apr 21	New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX
NEWS	35	Apr 28	RDISCLOSURE now available on STN
NEWS	36	May 05	Pharmacokinetic information and systematic chemical names added to PHAR
NEWS EXPRESS			April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
NEWS INTER			General Internet Information
NEWS LOGIN			Welcome Banner and News Items

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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 12:57:01 ON 15 MAY 2003

=> file agricola caplus biosis  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

FILE 'AGRICOLA' ENTERED AT 12:57:15 ON 15 MAY 2003

FILE 'CAPLUS' ENTERED AT 12:57:15 ON 15 MAY 2003

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FILE 'BIOSIS' ENTERED AT 12:57:15 ON 15 MAY 2003

COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC. (R)

=> s arabitol or ribitol and plant?

L1            1856 ARABITOL OR RIBITOL AND PLANT?

=> s l1 and (transform? or transgenic)

L2            54 L1 AND (TRANSFORM? OR TRANSGENIC)

=> del l1 y

=> del l2 y

=> s (arabitol or ribitol) and plant?

L1            326 (ARABITOL OR RIBITOL) AND PLANT?

=> s l1 and (transform? or transgenic)

L2            22 L1 AND (TRANSFORM? OR TRANSGENIC)

=> dup rem l2

PROCESSING COMPLETED FOR L2

L3            17 DUP REM L2 (5 DUPLICATES REMOVED)

=> d 1-10 ti

L3    ANSWER 1 OF 17    CAPLUS    COPYRIGHT 2003 ACS

TI    High protein phenotype-associated **plant** genes and their use for generating **transgenic plants** with improved nutritional properties

L3    ANSWER 2 OF 17    CAPLUS    COPYRIGHT 2003 ACS

TI    Genes for polyol-transporting proteins of **plants** and bacteria and their expression in **transgenic plants** with improved stress resistance

L3    ANSWER 3 OF 17    CAPLUS    COPYRIGHT 2003 ACS

TI Sugar and sugar alcohol utilization as a positive selection marker in cloning vectors

L3 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2003 ACS

TI cDNA sequences of polynucleotides from peppermint oil gland and their uses

L3 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2003 ACS

TI Metabolic pathways and enzymes in isoprenoid biosynthesis and their use in screening assays for inhibitors and herbicide resistance

L3 ANSWER 6 OF 17 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America: It contains copyrighted materials. All rights reserved. (2003) DUPLICATE 1

TI A non-antibiotic marker for amplification of **plant transformation** vectors in E. coli.

L3 ANSWER 7 OF 17 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

TI Cloning and expression of Vhb gene in D-**arabitol** producing yeast.

L3 ANSWER 8 OF 17 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

TI Characterization and complementation of a Pichia stipitis mutant unable to grow on D-xylose or L-arabinose.

L3 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2003 ACS

TI **Transgenic** monocot **plant** with increased osmoprotectant content to enhance water deficit-tolerance

L3 ANSWER 10 OF 17 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

TI Isolation of Aspergillus niger creA mutants and effects of the mutations on expression of arabinases and L-arabinose catabolic enzymes.

=> d 2 ab

L3 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2003 ACS

AB The invention concerns the use of a DNA sequence coding for a polyol carrier, in **plants** and fungi, such as polyols having a main chain contg. 5 to 8 carbon atoms, in particular 5 to 7 carbon atoms, more preferably 6 carbon atoms, said polyols being advantageously selected among mannitol, sorbitol, dulcitol, galactitol, inositol, myo-inositol, **ribitol** and xylitol, and being preferably mannitol, for prepg. **transgenic plants**. Polyols play an important role in stress resistance in **plants** and improving transport may improve stress resistance. A cDNA for a polyol transporter of phloem of Apium graveolens was cloned by PCR using conserved sequences of sugar-transporting proteins to design primers. Anal. of the sequence of the protein encoded by the cDNA indicated that it had 12 transmembrane domains and a central hydrophilic region. Function of the protein was demonstrated using a yeast with a mannitol dehydrogenase activity and capable of utilizing mannitol as a host. Expression of the transporter gene in the yeast increased its growth rate on mannitol. The gene was strongly induced by salt stress in the phloem of celery **plants**.

=> d 3 pi

L3 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2003 ACS

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001066779	A2	20010913	WO 2001-US7474	20010308
WO 2001066779	A3	20030109		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,  
 HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,  
 LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,  
 SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,  
 ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 AU 2001040117 A5 20010917 AU 2001-40117 20010308  
 US 2003041352 A1 20030227 US 2001-802208 20010308

=> d 3 in

L3 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2003 ACS  
 IN Parrott, Wayne; Lafayette, Peter; Kane, Patrick

=> d 9 ab

L3 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2003 ACS  
 AB Provided is a recombinant DNA method for conferring tolerance or resistance to water or salt stress in a monocot **plant** by altering the osmoprotectant (e.g. mannitol) content in the monocot **plant**. The method consists of introducing a recombinant DNA encoding an enzyme that catalyzes the synthesis of an osmoprotectant in **plant** cells, fertile **plants** are then grown from the **transformed** cells. Prepn. of a mannitol dehydrogenase (Mt1D) expression vector in combination of constitutive expression promoters, tissue-specific promoters, or environment-responsive promoters for maize is described. **Transgenic** maize **plants** prepd. with this method were characterized for their water and salt tolerance.

=> d 9 pi

L3 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2003 ACS

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9726365	A2	19970724	WO 1997-US978	19970117
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5780709	A	19980714	US 1996-594861	19960119
AU 9717065	A1	19970811	AU 1997-17065	19970117
EP 889967	A2	19990113	EP 1997-903051	19970117
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9707017	A	19990720	BR 1997-7017	19970117

=> d 11-17 ti

L3 ANSWER 11 OF 17 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
 TI Expression patterns of ten hemicellulase genes of the filamentous fungus Trichoderma reesei on various carbon sources.  
 L3 ANSWER 12 OF 17 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States

of America. It contains copyrighted materials. All rights reserved.  
(2003) DUPLICATE 2

- TI Arabinase gene expression in *Aspergillus niger*: indications for coordinated regulation.
- L3 ANSWER 13 OF 17 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Cloning of the *Aspergillus niger* gene encoding alpha-L-arabinofuranosidase A.
- L3 ANSWER 14 OF 17 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Molecular cloning, expression and structure of the endo-1,5-alpha-L-arabinase gene of *Aspergillus niger*.
- L3 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2003 ACS  
TI **Transgenic plants** with altered polyol content and cloning of genes for polyol-producing enzymes from stress-tolerant **plants**
- L3 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 3  
TI Partitioning of photosynthate in leaves of *Vitis vinifera* infected with *Uncinula necator* or *Plasmopora viticola*
- L3 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2003 ACS  
TI Soluble carbohydrates in bean leaves **transformed** into oxidant-tolerant tissues by EDU treatment

=> d 17 ab

- L3 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2003 ACS  
AB Improved gas-liq. chromatog. techniques were used to evaluate the effects of N-[2-(2-oxo-1-imidazolidinyl)ethyl]-N'-phenylurea (EDU) [54924-46-8] on sol. leaf carbohydrates in *Phaseolus vulgaris* Bush Blue Lake 290. This snap bean cultivar is normally rather sensitive to O<sub>3</sub>, but becomes highly tolerant when treated systemically with EDU. Less than 24 h is required to induce the resistance. Standardized trifoliolate leaves from EDU-treated and control **plants** were sampled 48 h after treatment. Addnl. **plants** were exposed to O<sub>3</sub> one day after EDU soil application to assess the **plant** tolerance induced. The optimal dose required to enhance oxidant tolerance was 50 mg/pot. Major sugars in both EDU-treated (O<sub>3</sub>-tolerant) and untreated (O<sub>3</sub>-sensitive) leaves were glyceraldehyde [367-47-5], erythritol [149-32-6], fructose [57-48-7], glucose [50-99-7], and sucrose [57-50-1]. Myo-Inositol [87-89-8], ribose [50-69-1], and **arabitol** [2152-56-9] were present in lesser or trace amts. EDU-treatment resulted in significant increases (35-62%) in all sol. carbohydrates except glyceraldehyde and myo-inositol. Implications relating to **plant** tolerance, to oxidants, and stress-induced senescence are discussed.

=> s ((parrot, w?) or (parrot w?))/au  
L4 10 ((PARROT, W?) OR (PARROT W?))/AU

=> dup rem l4  
PROCESSING COMPLETED FOR L4  
L5 8 DUP REM L4 (2 DUPLICATES REMOVED)

=> d 1-8 ti

- L5 ANSWER 1 OF 8 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved.  
(2003)  
TI Analyses of the data presented in "Transgenic DNA introgressed into

traditional maize landraces in Oaxaca, Mexico" by D. Quist and I.H. Chapela, (Nature 29 November 2001 issue (Vol 414, pp 541-543)).

- L5 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2003 ACS  
TI Growth characteristics and transformability of soybean embryogenic cultures
- L5 ANSWER 3 OF 8 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2003)  
TI RFLP mapping of resistance to southern root-knot nematode in soybean.
- L5 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 1  
TI Aluminum tolerance in alfalfa as expressed in tissue culture
- L5 ANSWER 5 OF 8 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI FEEDING RESPONSE OF BOLL WEEVILS TO ESTER EXTRACTS OF VARIOUS COTTON PLANT PARTS.
- L5 ANSWER 6 OF 8 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI LIPID COMPOSITION OF SOYBEAN SOMATIC EMBRYOS AND SOMACLONAL VARIANTS.
- L5 ANSWER 7 OF 8 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2003) DUPLICATE 2  
TI Distribution of tobacco budworm (*Heliothis virescens* (F.)); Lepidoptera: Noctuidae) eggs within cotton plants.
- L5 ANSWER 8 OF 8 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI FEEDING SITES OF YOUNG STAGE TOBACCO BUDWORM *HELIOTHIS-VIRESCENS* ON COTTON.

=> d 2 ab

- L5 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2003 ACS  
AB Embryogenic cultures of soybean (*Glycine max*) soybean were established in liq. Finer and Nagasawa medium, maintained by transfer to fresh medium at biweekly intervals, and subjected to microprojectile bombardment over time. Cultures were not amenable to transformation until they were at least 6 mo old. Over time, different cell lines of the same genotype acquired very different culture phenotypes. Histol. anal. of cell lines differing in transformation ability showed that the most transformable cultures had cytoplasmic-rich cells in the outermost layers of the tissue. In contrast, the outer layers of less transformable cultures contained cells with prominent vacuoles. Although fresh wt. accumulation of the cultures was curvilinear during the 2-wk subculture period, a burst of mitotic activity was evident shortly after transfer to fresh medium. This activity usually lasted from the 2nd to the 6th day following subculture, and peaked on the 4th day. Tissues at or near this stage always produced more transient expression of a reporter gene than did bombardments at other times. In addn., the cell lines most amenable to transformation also exhibited the highest mitotic index. Thus any treatment to increase the mitotic index, esp. when the cell lines are less than 6 mo old, may facilitate the transformation of cell lines from which efficient recovery of transgenic plants is still possible.

=> s ((lafayette p?) or (lafayette, p?))/au  
L6 67 ((LAFAYETTE P?) OR (LAFAYETTE, P?))/AU

=> dup rem 16

PROCESSING COMPLETED FOR L6

L7 38 DUP REM L6 (29 DUPLICATES REMOVED)

=> s 17 and plant?

L8 22 L7 AND PLANT?

=> d 1-11 ti

L8 ANSWER 1 OF 22 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2003)

TI Analyses of the data presented in "Transgenic DNA introgressed into traditional maize landraces in Oaxaca, Mexico" by D. Quist and I.H. Chapela, (Nature 29 November 2001 issue (Vol 414, pp 541-543)).

L8 ANSWER 2 OF 22 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2003)

TI A non-antibiotic marker for amplification of **plant** transformation vectors in E. coli.

L8 ANSWER 3 OF 22 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2003)

TI Laccases associated with lignifying vascular tissues.

L8 ANSWER 4 OF 22 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2003)

TI Molecular characterization of cDNAs encoding low-molecular-weight heat shock proteins of soybean.

L8 ANSWER 5 OF 22 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2003)

TI Isolation and characterization of three families of auxin down-regulated cDNA clones.

L8 ANSWER 6 OF 22 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2003)

TI Structure and expression of two auxin-inducible genes from Arabidopsis.

L8 ANSWER 7 OF 22 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2003)

TI Soluble and membrane-associated heat shock proteins in soybean root.

L8 ANSWER 8 OF 22 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2003)

TI Laboratory studies into the reduction of pollution from poultry processing by in-plant recycle

L8 ANSWER 9 OF 22 CAPLUS COPYRIGHT 2003 ACS

TI Artificial gene-clusters engineered into **plants** using a vector



system based on intron- and intein-encoded-endonucleases

L8 ANSWER 10 OF 22 CAPLUS COPYRIGHT 2003 ACS  
TI Sugar and sugar alcohol utilization as a positive selection marker in cloning vectors

L8 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2003 ACS  
TI Analysis of multiple classes of soybean heat shock genes and proteins

=> d 10 pi

L8 ANSWER 10 OF 22 CAPLUS COPYRIGHT 2003 ACS  
PATENT NO. KIND DATE APPLICATION NO. DATE  
-----  
PI WO 2001066779 A2 20010913 WO 2001-US7474 20010308  
WO 2001066779 A3 20030109  
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
AU 2001040117 A5 20010917 AU 2001-40117 20010308  
US 2003041352 A1 20030227 US 2001-802208 20010308

=> d 12-22 ti

L8 ANSWER 12 OF 22 CAPLUS COPYRIGHT 2003 ACS  
TI Laccase as a target for decreasing lignin content in transgenic trees through antisense genetic engineering

L8 ANSWER 13 OF 22 CAPLUS COPYRIGHT 2003 ACS  
TI Localization of small heat shock proteins to the higher plant endomembrane system

L8 ANSWER 14 OF 22 CAPLUS COPYRIGHT 2003 ACS  
TI Sequence and expression of a HSP83 from Arabidopsis thaliana

L8 ANSWER 15 OF 22 CAPLUS COPYRIGHT 2003 ACS  
TI Laboratory studies into the reduction of pollution from poultry processing by in-plant recycle

L8 ANSWER 16 OF 22 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Engineering soybeans for the production of edible vaccines for poultry.

L8 ANSWER 17 OF 22 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI A vector system for creating and transforming with gene artificial clusters.

L8 ANSWER 18 OF 22 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Letter received on Wednesday 14, August, 2002.

L8 ANSWER 19 OF 22 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Immunization of poultry with surface antigens of viral diseases expressed in transgenic soybean.

L8 ANSWER 20 OF 22 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Characterization of four laccase genes which are differentially expressed in cambium/lignifying tissue of yellow-poplar (Liriodendron tulipifera).

L8 ANSWER 21 OF 22 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Isolation of laccases and their encoding genes from *Zinnia elegans*.

L8 ANSWER 22 OF 22 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Molecular characterization of hardwood laccase genes.

=> s ((kane p?) or (kane, p?))/au  
L9 450 ((KANE P?) OR (KANE, P?))/AU

=> s l9 and plant?  
L10 28 L9 AND PLANT?

=> dup rem l10  
PROCESSING COMPLETED FOR L10  
L11 27 DUP REM L10 (1 DUPLICATE REMOVED)

=> d 1-10 ti

L11 ANSWER 1 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI The RAVE complex is essential for stable assembly of the yeast V-ATPase.

L11 ANSWER 2 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Mutational analysis of the subunit C (Vma5p) of the yeast vacuolar H<sup>+</sup>-ATPase.

L11 ANSWER 3 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Novel vacuolar H<sup>+</sup>-ATPase complexes resulting from overproduction of Vma5p and Vma13p.

L11 ANSWER 4 OF 27 CAPLUS COPYRIGHT 2003 ACS  
TI Sugar and sugar alcohol utilization as a positive selection marker in cloning vectors

L11 ANSWER 5 OF 27 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 1  
TI Optical emission spectroscopy and analysis of fertilizer source materials: continued examination of systematic errors

L11 ANSWER 6 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Cytosolic Ca<sup>2+</sup> homeostasis is a constitutive function of the V-ATPase in *Saccharomyces cerevisiae*.

L11 ANSWER 7 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI The H subunit (Vma13p) of the yeast V-ATPase inhibits the ATPase activity of cytosolic V1 complexes.

L11 ANSWER 8 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Regulation of V-ATPases by reversible disassembly.

L11 ANSWER 9 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Assembly and regulation of the yeast vacuolar H<sup>+</sup>-ATPase.

L11 ANSWER 10 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Early steps in assembly of the yeast vacuolar H<sup>+</sup>-ATPase.

=> d 11-20 ti

L11 ANSWER 11 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Biosynthesis and regulation of the yeast vacuolar H<sup>+</sup>-ATPase.

L11 ANSWER 12 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Characterization of a temperature-sensitive yeast vacuolar ATPase mutant

with defects in actin distribution and bud morphology.

- L11 ANSWER 13 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Reversible association between the V1 and V0 domains of yeast vacuolar H<sup>+</sup>-ATPase is an unconventional glucose-induced effect.
- L11 ANSWER 14 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Mutations in the yeast KEX2 gene cause a Vma<sup>-</sup>-like phenotype: A possible role for the Kex2 endoprotease in vacuolar acidification.
- L11 ANSWER 15 OF 27 CAPLUS COPYRIGHT 2003 ACS  
TI Studies on coolant degradation and development of a laboratory test method for predicting soluble oil emulsion oxidation stability
- L11 ANSWER 16 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Mutations in the CYS4 gene provide evidence for regulation of the yeast vacuolar H<sup>+</sup>-ATPase by oxidation and reduction in vivo.
- L11 ANSWER 17 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Site-directed mutagenesis of the yeast V-ATPase A subunit.
- L11 ANSWER 18 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Regulation of yeast vacuolar H<sup>+</sup>-ATPase activity by glucose metabolism in vivo.
- L11 ANSWER 19 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Wild-type and mutant vacuolar membranes support pH-dependent reassembly of the yeast vacuolar H<sup>+</sup>-ATPase in vitro.
- L11 ANSWER 20 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Mutational analysis of the catalytic subunit of the yeast vacuolar proton-translocating ATPase.

=> d 21-27 ti

- L11 ANSWER 21 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Site-directed mutagenesis of the yeast V-ATPase B subunit (Vma2p).
- L11 ANSWER 22 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Characterization of new mutants showing defects in vacuolar acidification.
- L11 ANSWER 23 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Disassembly and reassembly of the yeast vacuolar H<sup>+</sup>-ATPase in vivo.
- L11 ANSWER 24 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Possible role of phosphorylation in V-1-V-0 dissociation of the yeast V-ATPase.
- L11 ANSWER 25 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Partial assembly of the yeast vacuolar proton-ATPase in mutants lacking one subunit of the enzyme.
- L11 ANSWER 26 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI SUBUNIT COMPOSITION BIOSYNTHESIS AND ASSEMBLY OF THE YEAST VACUOLAR PROTON-TRANSLOCATING ATPASE.
- L11 ANSWER 27 OF 27 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Biogenesis of the yeast vacuolar proton-ATPase.

=> dis his

(FILE 'HOME' ENTERED AT 12:57:01 ON 15 MAY 2003)

FILE 'AGRICOLA, CAPLUS, BIOSIS' ENTERED AT 12:57:15 ON 15 MAY 2003

L1 326 S (ARABITOL OR RIBITOL) AND PLANT?  
L2 22 S L1 AND (TRANSFORM? OR TRANSGENIC)  
L3 17 DUP REM L2 (5 DUPLICATES REMOVED)  
L4 10 S ((PARROT, W?) OR (PARROT W?))/AU  
L5 8 DUP REM L4 (2 DUPLICATES REMOVED)  
L6 67 S ((LAFAYETTE P?) OR (LAFAYETTE, P?))/AU  
L7 38 DUP REM L6 (29 DUPLICATES REMOVED)  
L8 22 S L7 AND PLANT?  
L9 450 S ((KANE P?) OR (KANE, P?))/AU  
L10 28 S L9 AND PLANT?  
L11 27 DUP REM L10 (1 DUPLICATE REMOVED)

=> s mammitol and plant?

L12 0 MAMMITOL AND PLANT?

=>

<-----User Break----->

=> s mannitol and plant?

L13 5243 MANNITOL AND PLANT?

=> s l13 and (transform? or transgenic)

L14 307 L13 AND (TRANSFORM? OR TRANSGENIC)

=> s l14 and postive

L15 0 L14 AND POSTIVE

=> s l14 and select?

L16 33 L14 AND SELECT?

=> dup rem l16

PROCESSING COMPLETED FOR L16

L17 28 DUP REM L16 (5 DUPLICATES REMOVED)

=> d 1-10 ti

L17 ANSWER 1 OF 28 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 1  
TI Genetic **transformation** of two species of orchid by biolistic bombardment

L17 ANSWER 2 OF 28 CAPLUS COPYRIGHT 2003 ACS  
TI Methods for generating doubled haploid maize **plants**

L17 ANSWER 3 OF 28 CAPLUS COPYRIGHT 2003 ACS  
TI Genes for polyol-transporting proteins of **plants** and bacteria and their expression in **transgenic plants** with improved stress resistance

L17 ANSWER 4 OF 28 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Methods for generating doubled haploid **plants**.

L17 ANSWER 5 OF 28 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2003)  
TI Regulation of Arabidopsis thaliana Em genes: role of ABI5.

L17 ANSWER 6 OF 28 CAPLUS COPYRIGHT 2003 ACS  
TI Production of salt-tolerant mutant strain of Escherichia coli MK 148 and isolation of bacterial genes for proline biosynthesis

L17 ANSWER 7 OF 28 CAPLUS COPYRIGHT 2003 ACS

- TI Transformation of roses with genes for antifungal proteins to reduce their susceptibility to fungal diseases
- L17 ANSWER 8 OF 28 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 2
- TI Regeneration of **transgenic** loblolly pine expressing genes for salt tolerance
- L17 ANSWER 9 OF 28 CAPLUS COPYRIGHT 2003 ACS
- TI Sugar and sugar alcohol utilization as a positive **selection** marker in cloning vectors
- L17 ANSWER 10 OF 28 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2003) DUPLICATE 3
- TI High-resolution metabolic phenotyping of genetically and environmentally diverse potato tuber systems. Identification of phenocopies.

=> d 2 pi

L17 ANSWER 2 OF 28 CAPLUS COPYRIGHT 2003 ACS

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002052926	A2	20020711	WO 2002-US327	20020102
WO 2002052926	A3	20030403		

PI

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

=> d 5 ab

- L17 ANSWER 5 OF 28 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2003)
- AB In order to identify new factors involved in Em (a class I Late Embryogenesis Abundant protein) gene expression, Arabidopsis mutants with an altered expression of an Em promoter GUS fusion construct and a modified accumulation of Em transcripts and proteins were isolated. Germination tests on ABA showed that the most affected mutant had a weak abi phenotype. Complementation tests further revealed this mutant to be a new abi5 allele, consequently named abi5-5. In addition to reducing the final level of Em transcripts in the dry seed, the abi5-5 mutation causes a delay in the accumulation of AtEm1 during seed development. An additional characteristic of the abi5-5 mutant, is the ability of its seeds to germinate at high concentrations of salt and **mannitol**. The abi5-5 mutation was characterized at the molecular level and was shown to result from a two base pair deletion in the coding sequence of the ABI5 gene. The wild type and mutant recombinant proteins were produced in E. coli and were assayed for DNA-binding activity on their target promoters by electrophoretic mobility shift assay (EMSA). The ABI5 recombinant protein binds the ABRE sequence in the AtEm6 promoter as shown by Dnase footprinting. Among the ABRE-type sequences **selected** on both Em promoters, the G-box type AGACACGTGGCATGT element of the AtEm6 promoter shows the strongest binding by EMSA quantification.

=> d 8 so

L17 ANSWER 8 OF 28 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 2  
SO Journal of Forestry Research (English Edition) (2002), 13(1), 1-6  
CODEN: JFREAT; ISSN: 1007-662X

=> d 11-20 ti

L17 ANSWER 11 OF 28 CAPLUS COPYRIGHT 2003 ACS  
TI Methods for generating doubled haploid **plants** from microspores

L17 ANSWER 12 OF 28 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 4  
TI Effect of different factors on **transformation** of Alhagi  
pseudalhagi by Agrobacterium rhizogenes

L17 ANSWER 13 OF 28 CAPLUS COPYRIGHT 2003 ACS  
TI Studies on improving frequency of indica rice **transformation** by  
microprojectile bombardment

L17 ANSWER 14 OF 28 CAPLUS COPYRIGHT 2003 ACS  
TI **Transformation** of poinsettia and the development of  
insect-resistant varieties

L17 ANSWER 15 OF 28 CAPLUS COPYRIGHT 2003 ACS  
TI **Transformation** of Indica rice with Agrobacterium

L17 ANSWER 16 OF 28 CAPLUS COPYRIGHT 2003 ACS  
TI Alcohol/aldehyde dehydrogenases from Gluconobacter oxydans and their  
fusion proteins and use in enzymic synthesis of ascorbic acid

L17 ANSWER 17 OF 28 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Enhancement by osmotic treatment of hairy root **transformation** of  
alfalfa suspension cultures, and chromosomal variation in the  
**transformed** tissues.

L17 ANSWER 18 OF 28 AGRICOLA Compiled and distributed by the National  
Agricultural Library of the Department of Agriculture of the United States  
of America. It contains copyrighted materials. All rights reserved.  
(2003)  
TI The potential of **plant** tissue culture and related techniques for  
the improvement of salt tolerance in higher **plants**.

L17 ANSWER 19 OF 28 CAPLUS COPYRIGHT 2003 ACS  
TI **Transformation** of alfalfa suspension cultures by Agrobacterium  
rhizogenes

L17 ANSWER 20 OF 28 CAPLUS COPYRIGHT 2003 ACS  
TI Process for **selection** of **transformed plant**  
cells cultured under heterotrophic conditions and for increasing numbers  
of **transgenic plants** regenerated from said cells

=> d 20 ab

L17 ANSWER 20 OF 28 CAPLUS COPYRIGHT 2003 ACS  
AB The present invention involves a **selection** process for  
increasing the no. of **transformed plant** cells from a  
mixt. of **transformed** and non-**transformed plant**  
cells cultured under heterotrophic culture conditions. In accordance with  
this process, a mixt. of **transformed** and non-**transformed**  
**plant** cells is cultured under heterotrophic culture conditions in

a culture medium that contains minimal nutrients required for proliferation and growth by non-transformed plant cells except for a source of carbon that supports growth and proliferation and about 1.5 to 3 times the std. amt. of phosphorus. The source of carbon utilized is replaced by an encrypted carbon source that does not support growth and proliferation of said non-transformed cells. The transformed plant cells have a heterologous DNA segment inserted into their genome that contains at least one expression cassette. The expression cassette contains a heterologous DNA selectable marker segment that includes a first heterologous gene that encodes a heterologous enzyme that on expression converts the encrypted carbon source into a carbon source that supports growth and proliferation by the transformed plant cells under heterotrophic culture conditions. Addnl., the present invention also contemplates a selection process for increasing the no. of transformed plant cells from a mixt. of transformed and non-transformed plant cells cultured under delayed selective culture conditions. Transgenic tomato plants were regenerated from transformed tomato cells expressing phosphomannose isomerase grown in medium contg. mannose and supernormal concns. of KH<sub>2</sub>PO<sub>4</sub>. These conditions resulted in increased nos. of regenerated transformed plant cells and a higher percentage of normal shoots.

=> d 20 pi

L17	ANSWER 20 OF 28 CAPLUS COPYRIGHT 2003 ACS			
	PATENT NO.	KIND	DATE	APPLICATION NO. DATE
	-----	---	-----	-----
PI	WO 9631612	A2	19961010	WO 1996-US4688 19960405
	WO 9631612	A3	19961121	
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI			
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN			
	AU 9655351	A1	19961023	AU 1996-55351 19960405
	AU 720006	B2	20000518	
	EP 820518	A2	19980128	EP 1996-912578 19960405
	R: ES, FR, GB, IT, NL			
	CN 1187219	A	19980708	CN 1996-194540 19960405
	US 6143562	A	20001107	US 1998-76359 19980512

=> d 21-28 ti

L17	ANSWER 21 OF 28 CAPLUS COPYRIGHT 2003 ACS	
TI	Biological degradation and composition of inedible sweet potato biomass	
L17	ANSWER 22 OF 28 CAPLUS COPYRIGHT 2003 ACS	
TI	<b>Transformation and selection of maize tissue and the regeneration of stably transformed fertile plants</b>	
L17	ANSWER 23 OF 28 CAPLUS COPYRIGHT 2003 ACS	
TI	Direct gene introduction into plant cells using an N <sub>2</sub> -laser microbeam	
L17	ANSWER 24 OF 28 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.	
TI	Improved conditions for protoplast formation and transformation of Pleurotus ostreatus.	
L17	ANSWER 25 OF 28 CAPLUS COPYRIGHT 2003 ACS	

TI Regeneration of **transgenic** soybean (Glycine max) **plants**  
from electroporated protoplasts

L17 ANSWER 26 OF 28 CAPLUS COPYRIGHT 2003 ACS

TI Embryogenic callus formation from maize protoplasts

L17 ANSWER 27 OF 28 CAPLUS COPYRIGHT 2003 ACS

TI Cryopreservation of Digitalis lanata cell cultures

L17 ANSWER 28 OF 28 CAPLUS COPYRIGHT 2003 ACS

TI Biological **transformation** of granulated organic matter. Societe  
Civile d'Etudes Biologiques Appliquees a l'Agriculture

=> s positive selection

L18 3131 POSITIVE SELECTION

=> s l18 and plant?

L19 216 L18 AND PLANT?

=> s l19 and (sugar or arabitol or ribitol or mannitol)

L20 6 L19 AND (SUGAR OR ARABITOL OR RIBITOL OR MANNITOL)

=> dup rem l20

PROCESSING COMPLETED FOR L20

L21 6 DUP REM L20 (0 DUPLICATES REMOVED)

=> d 1-6 ti

L21 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2003 ACS

TI **Sugar** and **sugar** alcohol utilization as a  
**positive selection** marker in cloning vectors

L21 ANSWER 2 OF 6 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

TI Genetic variation and plasticity of **Plantago coronopus** under  
saline conditions.

L21 ANSWER 3 OF 6 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

TI The maize rpl1 rust resistance gene identifies homologues in barley that  
have been subjected to diversifying selection.

L21 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2003 ACS

TI **Positive selection**

L21 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2003 ACS

TI A **positive selection** system for transformed eukaryotic  
cells based on mannose or xylose utilization

L21 ANSWER 6 OF 6 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

TI Improved conditions for protoplast formation and transformation of  
**Pleurotus ostreatus**.

=> d 4 ab

L21 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2003 ACS

AB A method of selecting genetically transformed cells from a population of  
cells comprising introducing a desired nucleotide sequence and a  
co-introduced nucleotide sequence into the genome of a cell whereby the  
desired nucleotide sequence or the co-introduced nucleotide sequence  
induces a pos. effect by giving the transformed cells a competitive  
advantage when the population of cells are supplied with an inactive  
compd. thereby allowing the transformed cells to be identified and  
selected from the non-transformed cells by means defined as pos.



selection; as well as cells transformed according to the method and **plants** derived therefrom. The invention further relates to novel glucuronide compds. including cytokinin glucuronide compds. for use in the method.

=> d 4 so

L21 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2003 ACS  
SO U.S., 44 pp., Cont.-in-part of U.S. 5,767,378.  
CODEN: USXXAM

=> d 5 pi

L21 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2003 ACS

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9420627	A1	19940915	WO 1994-EP575	19940228
W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, HU, JP, KP, KR, KZ, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, US, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2157470	AA	19940915	CA 1994-2157470	19940228
AU 9462077	A1	19940926	AU 1994-62077	19940228
AU 682495	B2	19971009		
HU 73387	A2	19960729	HU 1995-2566	19940228
JP 08509861	T2	19961022	JP 1994-519537	19940228
EP 804599	A1	19971105	EP 1994-909084	19940228
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
RU 2127759	C1	19990320	RU 1995-117962	19940228
ZA 9401467	A	19950904	ZA 1994-1467	19940302
US 5767378	A	19980616	US 1995-505302	19951003

=> d 6 ab

L21 ANSWER 6 OF 6 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AB Conditions suitable for the production and regeneration of *Pleurotus ostreatus* protoplasts from dikaryotic mycelia were examined. Three commercially available muralytic enzymes, including Sigma lysing enzyme, Novozym 234 and Novozym 234 LP, were used for production of protoplasts. Over 2 times 10<sup>-7</sup> protoplasts per gram fresh weight mycelia were obtained within 1.5 h by using each of these three enzymes. The colony regeneration rate was up to 12-13% on potato-dextrose-agar medium containing 0.8 M **mannitol**. Genetic transformation was based on **positive selection** for resistance to hygromycin B (HmB) using the plasmid vector pAN7-1 and accomplished by either electroporation or a polyethylene glycol (PEG)-divalent cation method. *P. ostreatus* strains used in this study have innate sensitivity to HmB at a critical inhibitory concentration of between 40-50 µg/ml. Selection for HmB resistance of this fungus, indicative of transformation, resulted in 3-48 HmB-resistant colonies per microgram of pAN7-1 per 10<sup>-7</sup> viable protoplasts. No significant differences were apparent when either transformation protocol or either *P. ostreatus* strain was used. The best electrical condition found for the electrotransformation of *P. ostreatus* is at a field strength of 2.6-2.8 kV/cm with a capacitance of 25-µF and a parallel resistance of 800 ohms, corresponding to a time constant range of 10-14 ms.

=> d 6 so

L21 ANSWER 6 OF 6 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
SO Applied Microbiology and Biotechnology, (1993) Vol. 40, No. 1, pp.

101-106.  
ISSN: 0175-7598.

=> s 119 and (transform? or transgenic)  
L22 72 L19 AND (TRANSFORM? OR TRANSGENIC)

=> s 122 and marker  
L23 31 L22 AND MARKER

=> dup rem 123  
PROCESSING COMPLETED FOR L23  
L24 25 DUP REM L23 (6 DUPLICATES REMOVED)

=> d 1-10 ti

L24 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2003 ACS  
TI Transposon mediated double **positive selection** vector  
for gene targeting or homologous recombination

L24 ANSWER 2 OF 25 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Positive selectable **marker** genes for routine **plant transformation**.

L24 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2003 ACS  
TI Sugar and sugar alcohol utilization as a **positive selection marker** in cloning vectors

L24 ANSWER 4 OF 25 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI Cells and non-human organisms containing predetermined genomic modifications and positive-negative selection methods and vectors for making same.

L24 ANSWER 5 OF 25 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI [Analysis of **marker** gene/selective agent systems alternatives to **positive selection** of **transgenic** papaya (Carica papaya L.) somatic embryos.  
Original Title: Analise de sistemas gene marcador/agente seletivo alternativos para selecao positiva de embrioes somaticos transgenicos de mamoeiro..

L24 ANSWER 6 OF 25 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI **Plant** selection principle based on xylose isomerase.

L24 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2003 ACS  
TI Galactose utilization as a **positive selection marker** in the **transformation** of **plant** cells

L24 ANSWER 8 OF 25 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI GAP1, a novel selection and counter-selection **marker** for multiple gene disruptions in Saccharomyces cerevisiae.

L24 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2003 ACS  
TI Efficient production of **transgenic** cassava using negative and **positive selection**

L24 ANSWER 10 OF 25 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
TI A novel episomal shuttle vector for **transformation** of Cryptococcus neoformans with the ccdB gene as a **positive selection marker** in bacteria.

=> d 2 so

L24 ANSWER 2 OF 25 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
SO In Vitro Cellular & Developmental Biology Plant, (March April, 2002) Vol.  
38, No. 2, pp. 125-128. print.  
ISSN: 1054-5476.

=> d 2 ab

L24 ANSWER 2 OF 25 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AB Plant genetic **transformation** technologies rely upon the selection and recovery of **transformed** cells. Selectable **marker** genes used so far have been either antibiotic resistance genes or herbicide tolerance genes. There is a need to apply alternative principles of selection, as more **transgenic** traits have to be incorporated into a **transgenic** crop and because of concern that the use of conventional **marker** genes may pose a threat to humans and the environment. New classes of **marker** genes are now available, conferring metabolic advantage of the **transgenic** cells over the non-**transformed** cells. The new selection systems, as described in this review, are being used with success and superior performance over the traditional **marker** systems.

=> d 2 aU

L24 ANSWER 2 OF 25 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AU Penna, Suprasanna; Sagi, Laszlo (1); Swennen, Rony

=> d 4 ab

L24 ANSWER 4 OF 25 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AB Positive-negative selector (PNS) vectors are provided for modifying a target DNA sequence contained in the genome of a target cell capable of homologous recombination. The vector comprises a first DNA sequence which contains at least one sequence portion which is substantially homologous to a portion of a first region of a target DNA sequence. The vector also includes a second DNA sequence containing at least one sequence portion which is substantially homologous to another portion of a second region of a target DNA sequence. A third DNA sequence is positioned between the first and second DNA sequences and encodes a **positive selection marker** which when expressed is functional in the target cell in which the vector is used. A fourth DNA sequence encoding a negative selection **marker**, also functional in the target cell, is positioned 5' to the first or 3' to the second DNA sequence and is substantially incapable of homologous recombination with the target DNA sequence. The invention also includes **transformed** cells containing at least one predetermined modification of a target DNA sequence contained in the genome of the cell. In addition, the invention includes organisms such as non-human **transgenic** animals and **plants** which contain cells having predetermined modifications of a target DNA sequence in the genome of the organism.

=> d 6 ab

L24 ANSWER 6 OF 25 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AB The xylose isomerase genes (xylA) from *Thermoanaerobacterium thermosulfurogenes* and *Streptomyces rubiginosus* were introduced and expressed in three **plant** species (potato, tobacco and tomato) and **transgenic plants** were selected on xylose-containing medium. The xylose isomerase genes were transferred to explants of the target **plant** by *Agrobacterium*-mediated **transformation**. The xylose isomerase genes were expressed under

the control of the enhanced cauliflower mosaic virus 35S promoter and the OMEGA' translation enhancer sequence from tobacco mosaic virus. In potato and tomato, xylose isomerase selection was more efficient than the established kanamycin selection. The level of enzyme activity in the regenerated **transgenic plants** selected on xylose was 5-25-fold higher than the enzyme activity in control **plants** selected on kanamycin. The xylose isomerase system enables **transgenic** cells to utilize xylose as a carbohydrate source. In contrast to antibiotic or herbicide resistance-based systems where **transgenic** cells survive on a selective medium but non-**transgenic** cells are killed, the xylose system is an example of a **positive selection** system where **transgenic** cells proliferate while non-**transgenic** cells are starved but still survive. The results show that a new selection method is established. The xylose system is devoid of the disadvantages of antibiotic or herbicide selection, and depends on an enzyme which is already being widely utilized in specific food processes and that is generally recognized as safe for use in the starch industry.

=> d 6 so

L24 ANSWER 6 OF 25 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
 SO In Vitro Cellular & Developmental Biology Plant, (March April, 2001) Vol. 37, No. 2, pp. 114-119. print.  
 ISSN: 1054-5476.

=> d 6 au

L24 ANSWER 6 OF 25 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
 AU Haldrup, Anna (1); Noerremark, Michael; Okkels, Finn Thyge

=> d 7 ab

L24 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2003 ACS  
 AB A pos. selection method for **transformation** of **plant** cells using genes for enzymes of galactose utilization is described. **Transformed** cells are able to survive in the presence of galactose or galactose derivs. whereas untransformed cells cannot. Use of a metabolic **marker** avoids the problems with other pos. selection markers such as antibiotic or herbicide resistance. Toxicity tests on a no. of species found that galactose at .ltoreq.10 g/L inhibited germination of embryos or explants. The development of galactose-resistant potatos by **transformation** with the Escherichia coli galT (galactose-1-phosphate uridylyltransferase) gene is demonstrated.

=> d 7 ab

L24 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2003 ACS  
 AB A pos. selection method for **transformation** of **plant** cells using genes for enzymes of galactose utilization is described. **Transformed** cells are able to survive in the presence of galactose or galactose derivs. whereas untransformed cells cannot. Use of a metabolic **marker** avoids the problems with other pos. selection markers such as antibiotic or herbicide resistance. Toxicity tests on a no. of species found that galactose at .ltoreq.10 g/L inhibited germination of embryos or explants. The development of galactose-resistant potatos by **transformation** with the Escherichia coli galT (galactose-1-phosphate uridylyltransferase) gene is demonstrated.

=> d 7 so

L24 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2003 ACS  
SO PCT Int. Appl., 86 pp.  
CODEN: PIXXD2

=> d 7 pi

L24 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2003 ACS

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000009705	A2	20000224	WO 1999-IB1465	19990811
WO 2000009705	A3	20000615		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2339346	AA	20000224	CA 1999-2339346	19990811
AU 9951893	A1	20000306	AU 1999-51893	19990811
GB 2343183	A1	20000503	GB 1999-18988	19990811
GB 2343183	B2	20010117		
EP 1105500	A2	20010613	EP 1999-936927	19990811
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			

=> d 9 ab

L24 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2003 ACS

AB In order to improve the efficiency of cassava (*Manihot esculenta* Crantz) **transformation**, two different selection systems were assessed, a pos. one based on the use of mannose as the selective agent, and a neg. one based on hygromycin resistance encoded by an intron-contg. hph gene. **Transgenic plants** selected on mannose or hygromycin were regenerated for the first time from embryogenic suspensions cocultivated with *Agrobacterium*. After the initial selection using mannose and hygromycin, 82.6% and 100% of the resp. developing embryogenic callus lines were **transgenic**. A system allowing **plant** regeneration from only **transgenic** lines was designed by combining chem. selection with histochem. GUS assays. In total, 12 morphol. normal **transgenic plant** lines were produced, five using mannose and seven using hygromycin. The stable integration of the transgenes into the nuclear genome was verified using PCR and Southern anal. RT-PCR and northern analyses confirmed the transgene expression in the regenerated **plants**. A rooting test on mannose contg. medium was developed as an alternative to GUS assays in order to eliminate escapes from the pos. selection system. Our results show that **transgenic** cassava **plants** can be obtained by using either antibiotic resistance genes that are not expressed in the micro-organisms or an antibiotic-free pos. selection system.

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